

NAVSEA  
STANDARD ITEM

FY-23

ITEM NO: 009-115  
DATE: 30 JUL 2015  
CATEGORY: II

1. SCOPE:

1.1 Title: Bearing Rebabbiting; accomplish

2. REFERENCES:

2.1 Standard Items

2.2 SL460-AA-HBK-010, Handbook for Inspection, Packaging, Handling, Storage and Transportation

2.3 DOD-STD-2188, Babbiting of Bearing Shells (METRIC)

2.4 T9074-AS-GIB-010/271, Requirements for Nondestructive Testing Methods

3. REQUIREMENTS:

3.1 Crate and secure each bearing identified in the work item. Packaging must conform to 2.2. Reuse crate for return shipping.

3.1.1 Ship crated material prepaid to and from the contractor's facility.

(I)(G)" SHIPPING CRATE INSPECTION"

3.1.2 Prior to packing and crating, visually inspect the crate for conformance and proper packaging and securing of each bearing.

3.2 Accomplishment of a Process Control Procedure (PCP) for the process of rebabbiting each bearing must be in accordance with NAVSEA Standard Items (See Note 4.3), each bearing drawing, 2.3, and ASTM B339. The PCP must provide for accomplishment of all steps from receipt inspection to final dimensional inspection and verify compliance with and documentation of the following steps:

3.2.1 Receipt inspection of babbitt and tin to the requirements of 2.3 and ASTM B339.

3.2.2 Receipt inspection of bearing

- 3.2.3 Removal of existing babbit
- 3.2.4 Bearing shell machining
- 3.2.5 Bearing shell cleanliness
- 3.2.6 Bearing shell fluxing
- 3.2.7 Bearing shell tinning temperatures
- 3.2.8 Bearing shell babbitting, centrifugal and or static
- 3.2.9 Centrifugal casting rotation speed
- 3.2.10 Static casting rodding
- 3.2.11 Pouring babbit temperatures of babbit and bearing shell
- 3.2.12 Post babbit machining

(I)(G) “VERIFICATION OF BOND”

3.2.13 Bond testing in accordance with DOD-STD-2188 and 2.4.

3.2.14 Final inspection to determine conformance to referenced drawing dimensional requirements.

(I)(G) “SHIPPING CRATE INSPECTION”

3.2.15 Packaging and crating inspection and conformance to 2.2 packaging requirements.

3.3 Submit one legible copy, in hard copy or approved transferrable media, of the PCP with all substantiating documents within one day of completion of the requirements of 3.2.15. Provide one additional legible hard copy of the completed PCP with the bearing when shipped.

4. NOTES:

4.1 Known source: American Metal Bearing Company  
7191 Acacia Avenue,  
Garden Grove, CA 92841-5297  
Contact number; 714-892-5527 or 800-888-3048

4.2 If drawing for bearing is not available, invoke NSI 009-90 to ensure bearing is correctly refurbished in conformance with equipment manufacturer’s requirements and specifications.

4.3 If a Process Control Procedure (PCP) for the process of rebabbiting each bearing in 3.2 is required; the use of Category II Standard Item 009-09 “Process Control Procedure (PCP); provide and accomplish” of 2.1 will be specified in the Work Item. If rebabbiting is accomplished by the OEM or other NAVSEA approved organization, a NAVSEA approved process may be used in lieu of a PCP.